Prodn. of fine particulate aluminium hydroxide and aluminium oxide used as ceramic precursors

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Abstract of **DE19522946**

Process for the prodn. of a fine particulate metal hydroxide with aluminium hydroxide as the main component comprises continuous addn. of water and a mixt. of aluminium oxide and at least one alkoxide of a metal selected from Mg, Ca, La, Fe, Si, Ti and Zr until such time as stirring is with a high shear rate or speed to form a metal hydroxide paste. Also claimed is a process for producing a fine particulate metal oxide with aluminium oxide as the main component comprising the above process and including the steps of by drying of the metal hydroxide and calcining of the dried metal hydroxide at 500-1500 deg C. Further claimed is a process for the prodn. of fine particulate aluminium hydroxide by continuous addn. of water and at least one cpd. selected from aluminium alkoxide and its derivs., which was produced by chemical modification of aluminium alkoxide using at least one chemical modification agent, until such time as stirring is executed with a high shear rate or speed to form an aluminium hydroxide paste and then drying of the aluminium hydroxide paste using a pneumatic conveyor drier or by heating of the aluminium hydroxide paste up to or above the b.pt. of the liq. of the paste at atmospheric pressure and spraying of the heated aluminium hydroxide paste under pressure from a nozzle. Further claimed is a process for the prodn. of fine particulate aluminium oxide comprising the above process and including the step of calcining of the fine particulate aluminium hydroxide at 500-1500 deg C.